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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,210	02/27/2004	Thomas J. Plona	26.0273 US	9128
7590 11/10/2008 Schlumberger K.K. Intellectual Property and Legal Department 2-2-1 Fuchinobe, Sagami-hara-shi Kanagawa-ken, 229-0006 JAPAN				
			EXAMINER	
			HUGHES, SCOTT A	
			ART UNIT	PAPER NUMBER
			3663	
			MAIL DATE	DELIVERY MODE
			11/10/2008 PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/789,210

**Applicant(s)**

PLONA ET AL.

**Examiner**

SCOTT A. HUGHES

**Art Unit**

3663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 March 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 74 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 74 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed 3/13/2008 in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/22/2008 has been entered.

### ***Response to Arguments***

Applicant's arguments filed 1/22/2008 have been fully considered but they are not persuasive.

Applicant argues that claim 74, which now incorporates claim 4, is patentable over Kimball in view of Bose because the combination of the references fails to provide the proper motivation to combine. Applicant argues that the prior art of record does not provide the proper necessary teachings to combine the cited references to arrive at claim 74. This argument is not persuasive, as the Bose reference provides a motivation for including the homogeneous and inhomogeneous characteristics of dispersion curve data in order to determine damaged areas of the formation near the borehole. Applicant has not argued why this teaching in Bose along with the Kimball reference does not teach all limitations of applicant's claim. Applicant has instead stated that the prior art does not have the teachings to combine the references, without explaining why this

particular motivation is not proper. Therefore, because there is a motivation to combine the references to look for damaged areas of the formation around the borehole, applicant's arguments with respect to the combination of Kimball and Bose are not persuasive.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 74 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kimball in view of Bose.

With regard to claim 74, Kimball discloses a method displaying sonic logging data associated with an earth formation surrounding a borehole (abstract). Kimball discloses acquiring sonic data at a plurality of depths in a borehole (Figs. 1, 6) (Column 4, Line 35 to Column 5, Line 40). Kimball discloses processing the acquired sonic data to generate a slowness-versus-frequency dispersion curve for each depth (Figs. 3a,b; 4) (abstract; Column 4, Lines 35-55; Column 7, Lines 14-68; Columns 11-14; Column 15 Line 6 to Column 16, Line 10). Kimball discloses displaying a projection log of dispersion curve data for each depth versus depth (Figs. 3a,b; 4-6) (abstract; Column 5, Lines 35-40; Column 7, Lines 14-68; Column 14 Line 23 to Column 16, Line 10). Kimball does not disclose that display includes homogeneous and inhomogeneous

characteristics of the dispersion curve data. Bose teaches a method of sonic logging. Bose teaches that the information displayed in an SFA log display includes homogeneous and inhomogeneous characteristics of the dispersion curve data (Fig. 17) (Columns 9-10). It would have been obvious to modify Kimball to include information in the display from sonic logging that include homogenous and inhomogeneous characteristics of the dispersion curve data in order to look for damage to the formation near the borehole.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SCOTT A. HUGHES whose telephone number is (571)272-6983. The examiner can normally be reached on M-F 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on (571) 272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott A. Hughes/  
Examiner, Art Unit 3663